(19) World Intellectual Property Organization

International Bureau



A DEBTA BENDER I A BEDDE DERN BEDER BEDER EICH EIN BERCHEICH BERCH BENDE IN DER BERCH BERCHEICH BERCH BERCH BE

(43) International Publication Date 23 December 2004 (23.12.2004)

PCT

(10) International Publication Number WO 2004/110619 A1

(51) International Patent Classification7:

B01J 20/18

(21) International Application Number:

PCT/KR2004/001467

- (22) International Filing Date: 18 June 2004 (18.06.2004)
- (25) Filing Language:

Korean

(26) Publication Language:

English

(30) Priority Data:

10-2003-0039691

19 June 2003 (19.06.2003) KF

- (71) Applicant (for all designated States except US): SO-GANG UNIVERSITY CORPORATION [KR/KR]; 1, Shinsu-dong, Mapo-gu, Seoul 121-742 (KR).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): YOON, Kyung Byung [KR/KR]; 345-123, Pyungchang-dong, Jongno-gu, Scoul 110-847 (KR). LEE, Eun Ah [KR/KR]; 491-26, Amsa 1-dong, Gangdong-gu, Scoul 134-859 (KR). JEON, Eun [KR/KR]; 302, 418-33, Hapjcong-dong, Mapo-gu, Seoul 121-220 (KR). LEE, Yun Jo [KR/KR]; 103, 98-14, Yeomni-dong, Mapo-gu, Seoul 121-872 (KR).

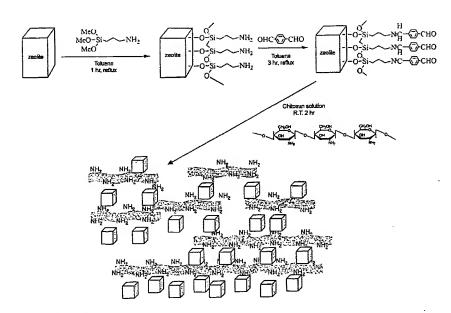
- (74) Agent: SESHIN PATENT & LAW FIRM; 8th Fl., KFSB bldg., 16-2 Yeoedo-dong, Yeongdeungpo-ku, Seoul 150-010 (KR).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

with international search report

[Continued on next page]

(54) Title: PROCESS FOR PREPARING POROUS HYBRID COMPRISING ZEOLITE AND CHITOSAN AND POROUS HYBRID PREPARED THEREBY



(57) Abstract: The present invention relates to a process for preparing a porous hybrid comprising zeolite and chitosan and a porous hybrid prepared thereby, in particular, to a process for preparing a porous chitosan-linking compound-zeolite hybrid, which comprises the steps of: (a) forming a linking compound-zeolite intermediate by linking a linking compound to the surface of zeolite; and (b) preparing said chitosan-linking compound-zeolite hybrid by reacting said linking compound- zeolite intermediate with chitosan or a linking compound-chitosan, a porous hybrid prepared thereby, an adsorbent and a method for purifying water.



2004/110619 A1

WO 2004/110619 A1



before the expiration of the time limit for amending the For two-letter codes and other abbreviations, refer to the "Guidclaims and to be republished in the event of receipt of amendments

ance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.